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Faculty of Math., Comp. Sci., Phys.  
& Astro.  
Dept. of Computer Science  
Kruislaan 403  
1098 SJ Amsterdam, The Netherlands  
e-mail: janb@wins.uva.nl/janb@phil.uu.nl

Founding Editor

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e-mail: db@it.dtu.dk

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e-mail: jacksonma@attmail.com

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Department of Computing Science  
Newcastle upon Tyne NE1 7RU, UK  
e-mail: cliff.jones@ncl.ac.uk

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The Netherlands  
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B. Selic

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ObjectTime Limited  
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J.V. Tucker

University of Wales Swansea  
Department of Computer Science  
Singleton Park  
Swansea SA2 8PP, UK  
e-mail: j.v.tucker@swan.ac.uk

P. Wegner

Brown University  
Providence, RI, USA  
e-mail: pw@cs.brown.edu

Aims and scope

*Science of Computer Programming* will be dedicated to the distribution of research results on software systems development, maintenance and use, including the software aspects of hardware design. The journal has a wide scope ranging from the many facets of methodological foundations to the details of technical issues and to the aspects of industrial practice.

The subjects of interest to *Science of Computer Programming* cover the entire spectrum of methods for the entire life cycle of software systems, including

- \* requirements, specification, design, validation, verification, coding, testing, maintenance, metrics and renovation of software;
- \* design, implementation and evaluation of programming languages;
- \* programming environments, development tools, visualisation and animation;
- \* management of the development process;
- \* human factors in software.

Special emphasis will be given to recent trends in software development, such as software architecture, component-based software development and web-based software engineering.

*Science of Computer Programming* will be divided into five tracks.

These are: (1) Concepts and methodology, (2) Formal techniques, (3) Experimental software technology, (4) Descriptive software technology, (5) Speedy publication track.

(1) The conceptual track is open for methodological, philosophical and sociological studies on all aspects of computer software production and usage, including ethics.

(2) The formal track emphasizes the development and the pragmatic application of formal and semiformal techniques. Submissions which the editors consider mainly mathematical or theoretical in nature, with the preliminary consent of the authors, will normally be forwarded to the sister journal *Theoretical Computer Science*.

(3) The experimental track is open for expositions on implementations of and experiments with novel programming languages, systems and methods. It must be emphasized that papers describing new software tools of relevance to *Science of Computer Programming* are welcome under the strict condition that the source code of the tools is open.

(4) The descriptive track finally deals with observational studies of current software development practices, reporting on new languages, systems and methods, including survey reports on the various themes.

(5) The speedy track is a meta-track for the fast publication of particularly valuable new ideas and results, providing the opportunity of reaching a wide audience within the time limits normally offered by conference proceedings, within about six months from submission, with a notice of acceptance or rejection within three months. The related submissions have to be sent directly to both the Editors-in-Chief and are subject to a page limit.

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